



Reclaiming the Sierra 2015: The New Gold Rush

Site Prioritization Track

Stephen McCord, Ph.D., P.E.
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Four Presentations

Forest Suite

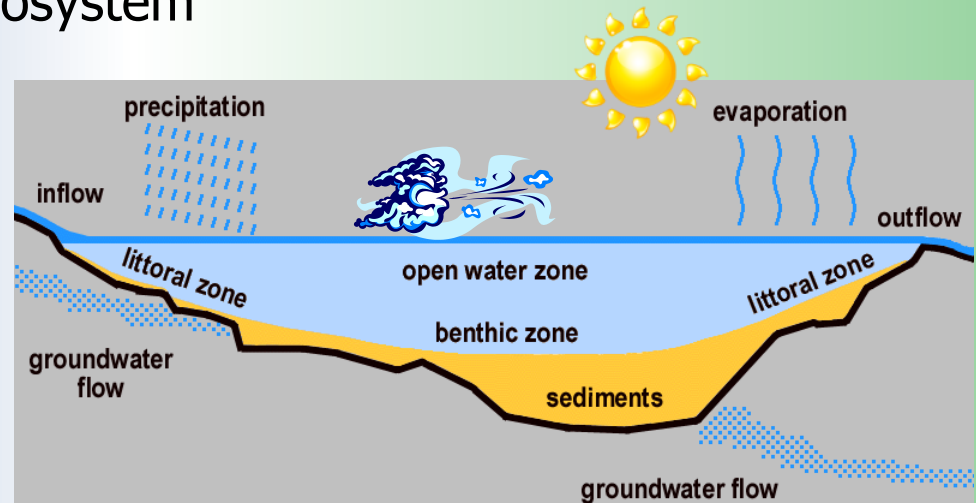
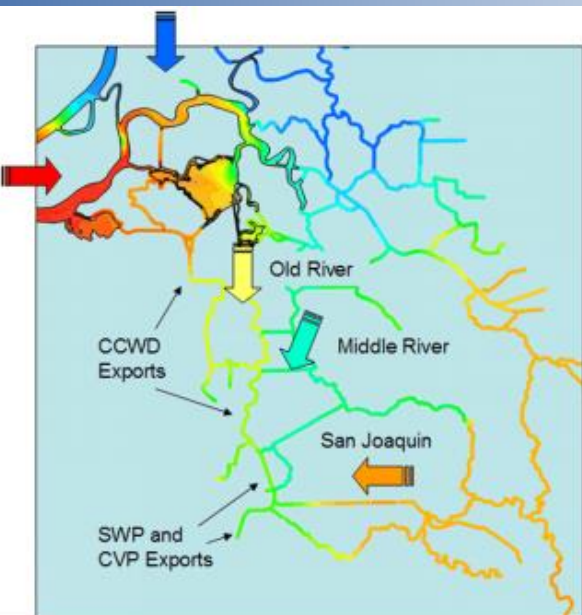
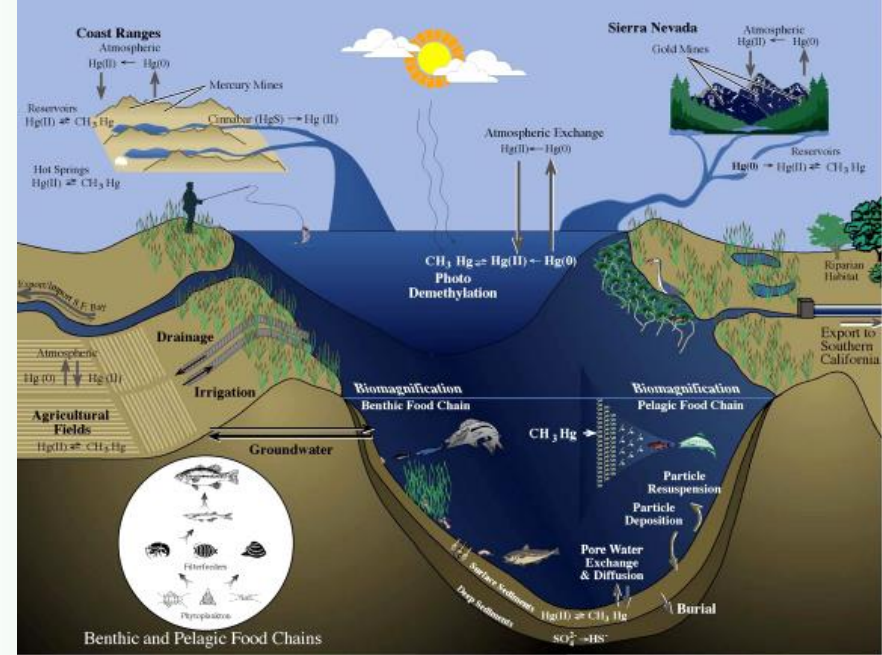
1. Yolo Bypass and Delta Mercury Modeling (Carol DiGiorgio, DWR)
 2. Sierra Nevada Mercury Impairment Project (Charlie Alpers, USGS)
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Hinde Aud.

3. Tools for Prioritizing AML Sites Statewide (Glenda Marsh, DOC)
4. Local Gov't Opportunities to Lead AML Prioritization (Alex Keeble-Toll, TSF)

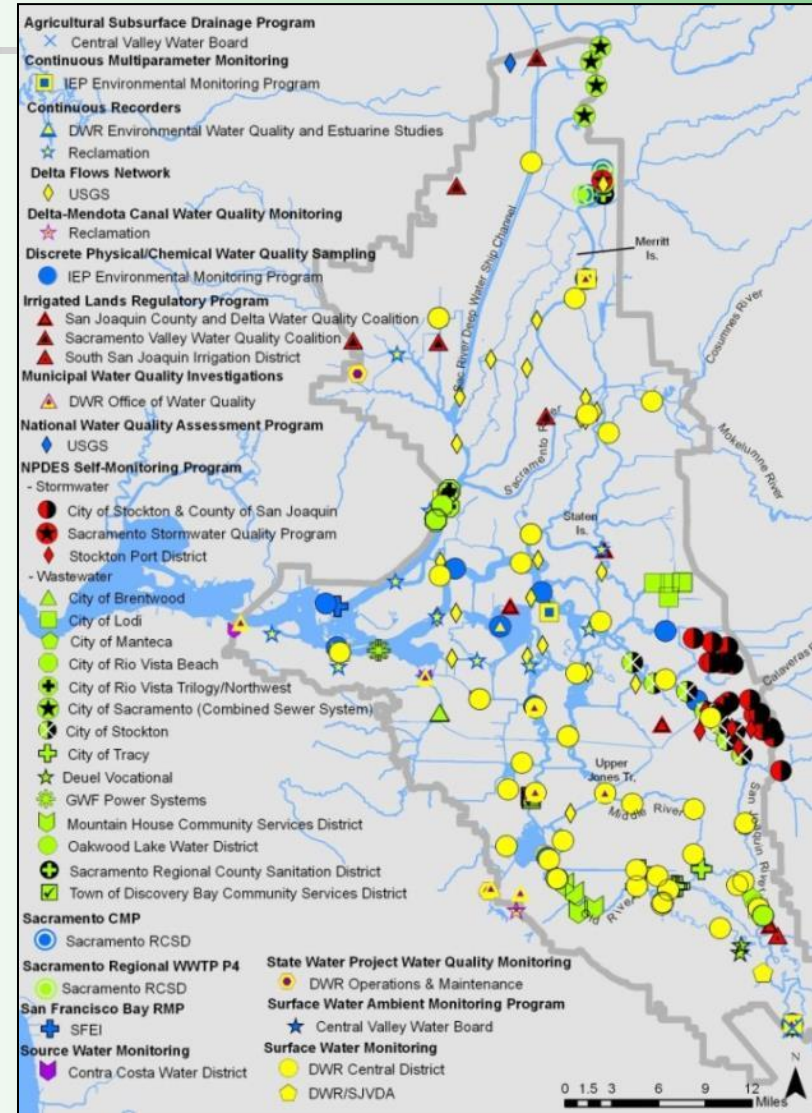
Models to Follow the Raindrops

- Sources
- Hydrology
 - Hydrodynamics
 - Sediment transport
 - Water quality
 - Ecosystem



Regional-Scale Monitoring with a Purpose

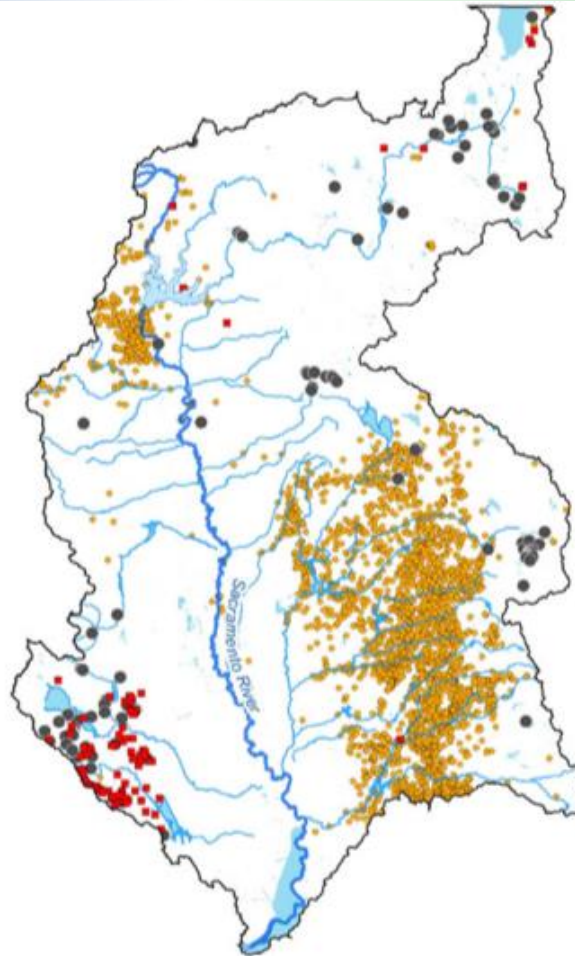
■ 1 RMP + 3 RMP "efforts"



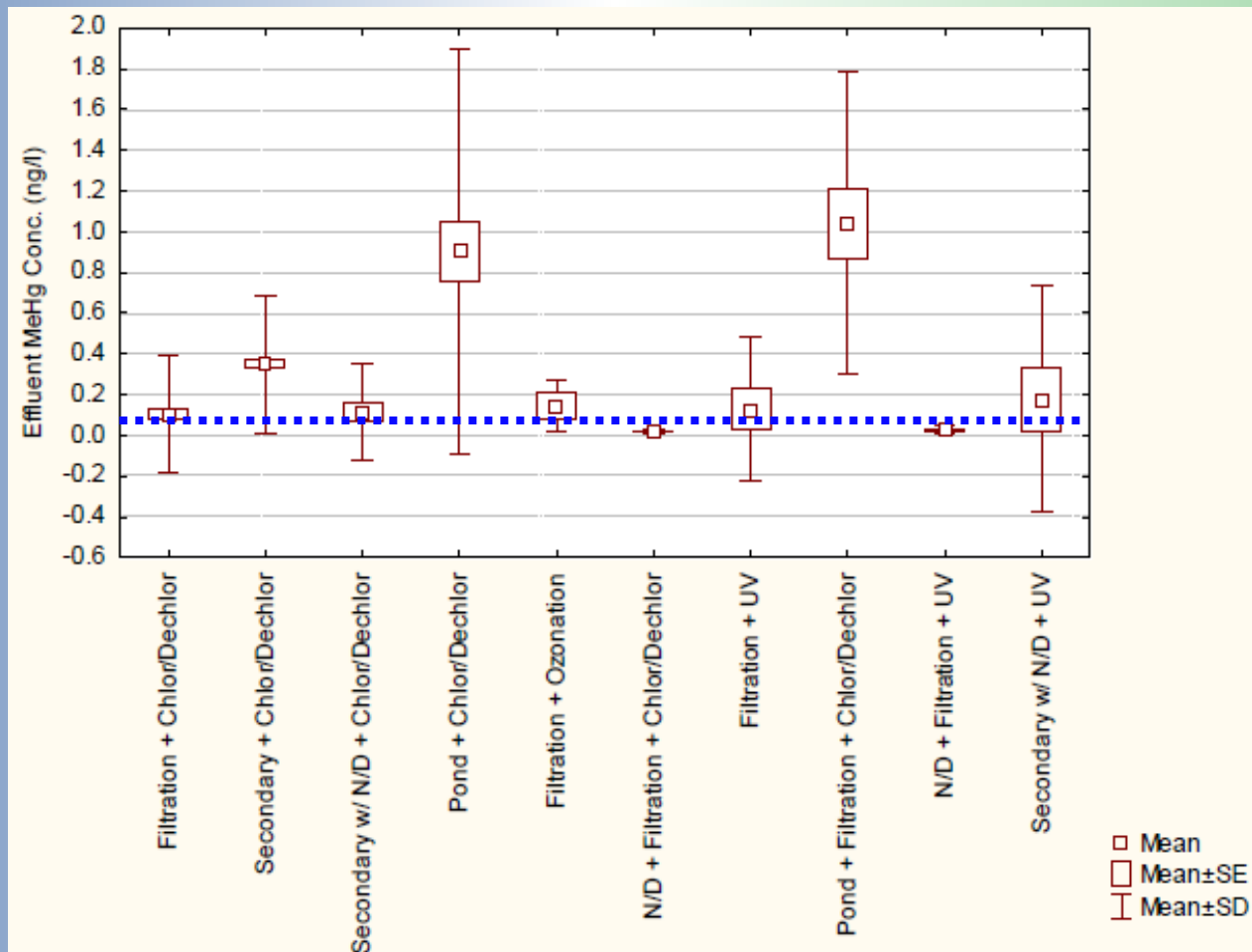
A. Source Control – Mine Site Remediation



- Thermal Spring
- Mercury Mine
- Gold Mine



B. Treatment Control – Process Comparisons



Source: "A Review of Methylmercury and Inorganic Mercury Discharges from NPDES Facilities in California's Central Valley." RWQCB, 2010

C. Methylation Control

Lakes

- Selective withdrawal
- Destratification
- Hypolimnetic oxygenation



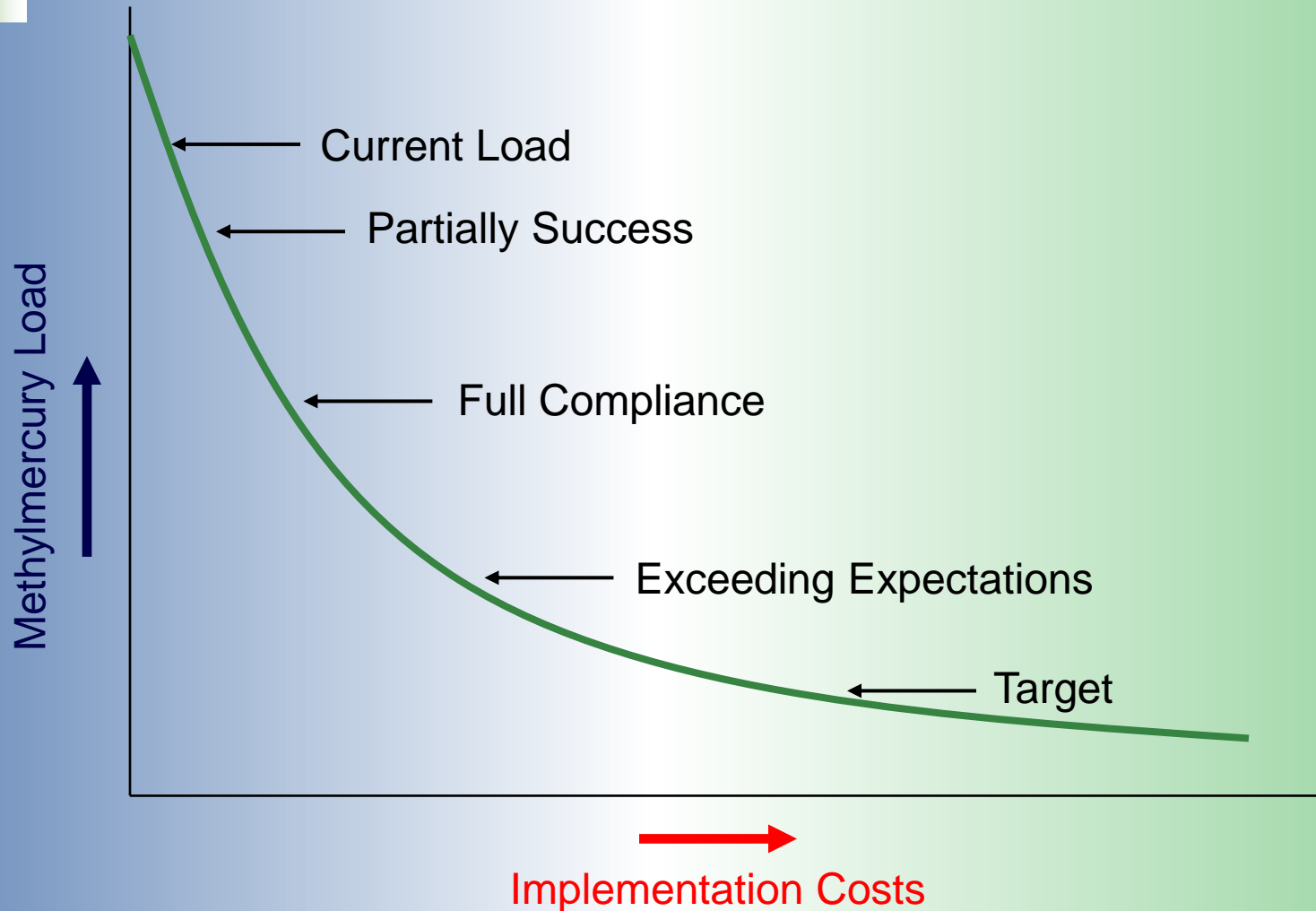
Wetlands

- Vegetation management
- Water management
- Permanent ponds

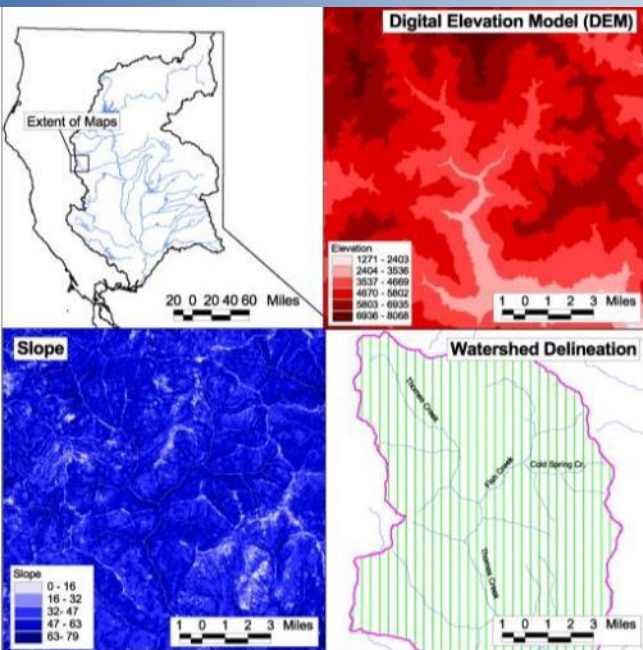
Photo courtesy of Josh Ackerman, USGS



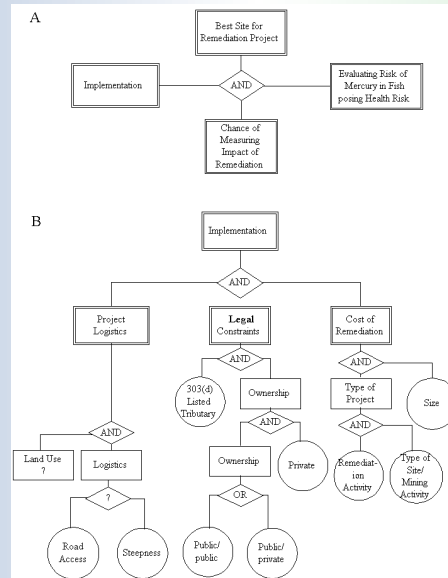
Develop Cost-Benefit Curves



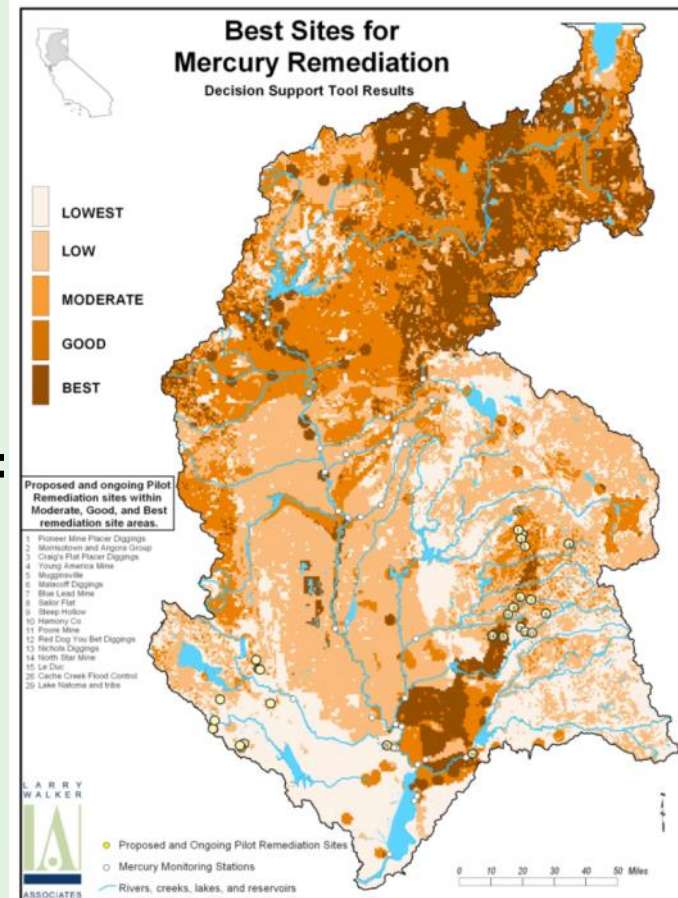
Decision Support Systems



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Key Points

- *It's complicated* – Simplify appropriately
- *It's everywhere* – Assess multiple scales
- *It's costly* – Prioritize and rally funds
- *It's time* – Start implementing